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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,808	02/08/2005	Philippe Rommeveaux	4590-373	1581

33308 7590 12/05/2007
LOWE HAUPTMAN & BERNER, LLP
1700 DIAGONAL ROAD, SUITE 300
ALEXANDRIA, VA 22314

EXAMINER

PATEL, REEMA

ART UNIT	PAPER NUMBER
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2812

MAIL DATE	DELIVERY MODE
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12/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,808

Applicant(s)

ROMMEVEAUX, PHILIPPE

Examiner

Reema Patel

Art Unit

2812

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 and 6 is/are allowed.
- 6) ☒ Claim(s) 4 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/14/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to an amendment filed 9/14/07.

Information Disclosure Statement

1. The information disclosure statement (IDS) was submitted on 9/14/07. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Claim Rejections - 35 USC § 103

2. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swirbel et al. (U.S. 6,091,194; hereinafter 'Swirbel').

3. Regarding claim 4, Swirbel discloses the close association of a monolithic electronic chip (20, Fig. 2), bearing on its front a dot matrix array and electrical contact lands (22, Fig. 2), and an optical structure (30, Fig. 2) for forming an overall image corresponding to the array, the optical structure being placed against the front of the chip, with electrical contacts (27, Fig. 2) on the back of the chip and conductive vias (28, Fig. 2) between these electrical contacts on the back and the contact lands on the front, for access to the matrix array (col 3, line 63 – col 4, line 29).

4. Swirbel lacks anticipation only in not specifying that the thickness of the chip is greater than 100 microns. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a chip thickness greater than 100 microns, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105

USPQ 233. Moreover, one of ordinary skill in the art would recognize an advantage of selecting a wafer thickness greater than 100 microns is increased mechanical stability of the chip. Therefore, it would have been obvious to modify the invention of Swirbel with the thickness of the chip greater than 100 microns so as achieve increased mechanical stability.

5. Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Swirbel et al. (U.S. 6,091,194; hereinafter 'Swirbel') as applied to claim 4 above, and further in view of Feldman (U.S. 4,050,786).

6. Regarding claim 5, the invention of Swirbel concerns an electroluminescent display (ELD) device. However, Swirbel discloses that an liquid crystal display (LCD) device would have the same mechanical structure as an ELD device with an exception of having a liquid crystal fluid substituted as the image forming material instead of an ELD layer (col 1, line 66 – col 2, line 2). An advantage of forming an LCD as opposed to an ELD is a longer device lifetime. Additionally, according to Feldman, it is known that liquid crystal may be filled in the cavity between two substrates by forming a hole in one of the substrates, filling the liquid crystal through the hole, and subsequently plugging the hole (col 4, lines 53-56). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Swirbel with filling the cavity between the substrates with a liquid crystal material so as to form a display device with a longer lifetime.

Allowable Subject Matter

7. Claims 1-3 and 6 remain allowable for the reasons set forth in the previous office action (mailed 5/14/07).

Response to Arguments

8. Applicant's arguments with respect to claims 4-5 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reema Patel whose telephone number is 571-270-1436. The examiner can normally be reached on M-F, 8:00-4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lebentritt can be reached on 571-272-1873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RSP
12/3/07


MICHAEL LEBENTRITT
SUPERVISORY PATENT EXAMINER